Fig. 1

CLIENT COMPUTER

DISPLAY

1

WEB SERVER

11

CUSTOMIZING TOOL

21

DATABASE

15

DATABASE CONTROLLER

14

SEARCH-PAGE GENERATING UNIT

13

CONTROLLER

12

TEMPLATE STORAGE UNIT

16

DATABASE SYSTEM

10

PAGE DEFINITION TABLE

PAGE NUMBER
PAGE NAME
ITEM-NAME NUMBER
ITEM ORDER
DISPLAY TYPE

ITEM-NAME DEFINITION TABLE

ITEM-NAME NUMBER
SEARCH-ITEM NAME
FIELD NAME

GENERAL-PURPOSE TABLE

DATA NUMBER
CHARACTER DATA STRING 1
CHARACTER DATA STRING 2
......
CHARACTER DATA STRING15
NUMERIC DATA STRING 1
NUMERIC DATA STRING 2
....
NUMERIC DATA STRING 10
DATE DATA STRING 1
....
DATE DATA STRING 5

Fig. 2

GENERAL-PURPOSE TABLE

Fig. 3

DATA NUMBER	FIELD NAME									
	CHARACTER DATA STRING 1	CHARACTER DATA STRING 2	...	CHARACTER DATA STRING 14	CHARACTER DATA STRING 15	NUMERIC DATA STRING 1	...	NUMERIC DATA STRING 10	...	DATE DATA STRING 1	...
1	PRINTER	C-300D		AAA ELECTRIC CO.	TA SYSTEM	18000		15600		1997/4/8
2	MONITOR	DN40T		BBB MONITOR CO.	FLAT PANEL	43000		7200		1998/1/19
....	....	....		....	....	....		....		....
1000		AB-100		EE MEDIA CO.	-	400		50000		1997/12/22
1001		C-123		FF ELECTRONICS CO.	MEGAPIXEL	780		8100		1999/2/20
....	....	....		....	....	....		....		....

Fig. 4

ITEM-NAME DEFINITION TABLE (BEFORE CHANGE)

ITEM-NAME NUMBER	ITME NAME	FIELD NAME
1	PRODUCT CATEGORY	CHARACTER DATA STRING 1
2	PRODUCT NAME	CHARACTER DATA STRING 2
⋮	⋮	⋮
9	MANUFACTURER NAME	CHARACTER DATA STRING 14
10	PRODUCT FEATURE	CHARACTER DATA STRING 15
11	WEIGHT	NUMERIC DATA STRING 1
⋮	⋮	⋮
21	NUMBER IN STOCK	NUMERIC DATA STRING 10
⋮	⋮	⋮
24	SALES DATE	DATE DATA STRING 1
⋮	⋮	⋮

PAGE DEFINITION TABLE (BEFORE CHANGE)

Fig. 5

PAGE NUMBER	PAGE NAME	ITEM-NAME NUMBER	ITEM ORDER	DISPLAY TYPE	VALUE
1	ROOT/query	1	1	TEXT	
1	ROOT/query	2	2	TEXT	
1	ROOT/query	9	3	LIST	AAA ELECTRIC CO./FFF ELECTRONICS CO./GG INDUSTRIES
1	ROOT/query	10	4	TEXT	
1	ROOT/query	11	5	TEXT	
1	ROOT/query	24	6	TEXT	
2	ROOT/Entry	1	1	TEXT	
2	ROOT/Entry	2	3	TEXT	
2	ROOT/Entry	9	2	TEXT	
2	ROOT/Entry	10	6	TEXT	
2	ROOT/Entry	11	5	TEXT	
2	ROOT/Entry	24	4	TEXT	
3	ROOT/List	1	1	TEXT	
3	ROOT/List	2	3	TEXT	
3	ROOT/List	9	2	TEXT	
3	ROOT/List	10	4	TEXT	
3	ROOT/List	11	6	TEXT	
3	ROOT/List	24	5	TEXT	

ITEM-NAME DEFINITION TABLE (AFTER CHANGE)   *Fig. 6*

ITEM-NAME NUMBER	ITEM NUMBER	FIELD
1	PRODUCT CLASS	CHARACTER DATA STRING 1
2	PRODUCT NAME	CHARACTER DATA STRING 2
⋮	⋮	⋮
9	NAME OF MANUFACTURING COMPANY	CHARACTER DATA STRING 14
10	PRODUCT FEATURE	CHARACTER DATA STRING 15
11	POUNDAGE	NUMERIC DATA STRING 1
⋮	⋮	⋮
21	NUMBER IN STOCK	NUMERIC DATA STRING 10
⋮	⋮	⋮
24	SALES DATE	DATE DATA STRING 1
⋮	⋮	⋮

Fig.7

PAGE NAME : ROOT/query

SET SEARCH CONDITIONS

SEARCH ALL   ITEM SEARCH

A1

PRODUCT CATEGORY	PRINTER	MATCH ▼
PRODUCT NAME		MATCH ▼
MANUFACTURE NAME	AAA ELECTRIC CO.	MATCH ▼
PRODUCT FEATURE		INCLUDES ▼
WEIGHT		~ ▼
SALES DATE	1997/1/1	~ ▼

JOIN CONDITION ● AND ○ OR   A3

SEARCH   A4

Fig. 8

PAGE NAME : ROOT/query

SET SEARCH CONDITIONS

SEARCH ALL | ITEM SEARCH

A1

PRODUCT CLASS	PRINTER	MATCH ▼
PRODUCT NAME		MATCH ▼
NAME OF MANUFACTURING COMPANY	AAA ELECTRIC CO.	MATCH ▼
PRODUCT FEATURE		INCLUDES ▼

POUNDAGE [   ] [~ ▼] [   ]

SALES DATE [1997/1/1] [~ ▼] [   ]

JOIN CONDITION ● AND ○ OR   A3

SEARCH   A4

Fig.9

PAGE NAME : ROOT/Entry

REGISTER

A5
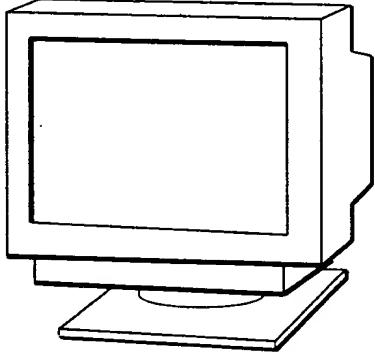
IMAGE INFORMATION | ATTACHMENT DOCUMENT

PRODUCT CATEGORY | MONITOR

MANUFACTURE NAME | BBB MONITOR CO.

PRODUCT NAME | DN40T

SALES DATE | 1997／4／5

WEIGHT | 43000

FEATURES | FLAT PANEL; FULL COLOR 1600×1280

A7

SELECT IMAGE

A6

REGISTER

A8

Fig. 10

PAGE NAME : ROOT/Entry

REGISTER

IMAGE INFORMATION | ATTACHMENT DOCUMENT

A5

PRODUCT CLASS | MONITOR

NAME OF MANUFACTURING COMPANY | BBB MONITOR CO.

PRODUCT NAME | DN40T

SALES DATE | 1997／4／5

POUNDAGE | 43000

FEATURES | FLAT PANEL; FULL COLOR 1600×1280

A7

SELECT IMAGE

A6

REGISTER

A8
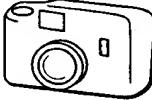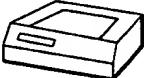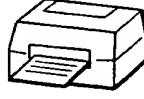
Fig. 11

PAGE NAME : ROOT/List

LIST OF SEARCH RESULTS

A21   A22

GROUP KEYWORD | PRODUCT CATEGORY ▼ | (GROUPING)

A10

THUMBNAIL IMAGES	PRODUCT CATEGORY	MANUFACTURE NAME	PRODUCT NAME	FEATURE
	PRINTER	AAA ELECTRIC CO.	C−300D	TA SYSTEM
	CAMERA	AAA ELECTRIC CO.	S−300	MEGAPIXEL
	PRINTER	CC PRINTER CO.	XT−70	INK JET
	PRINTER	DD CO.	NX−500Z	SUBLIMATION

◀◀ ◀ 1/200 ▶ ▶▶   (BACK) A41
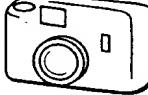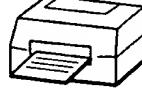
A33

A35 A34 A31 A32

Fig.12

PAGE NAME : ROOT/List

LIST OF SEARCH RESULTS

A21

A22

GROUP KEYWORD | PRODUCT CATEGORY ▼ | (GROUPING)

A10

THUMBNAIL IMAGES	PRODUCT CLASS	NAME OF MANUFACTURING COMPANY	PRODUCT NAME	FEATURE
	PRINTER	AAA ELECTRIC CO.	C—300D	TA SYSTEM
	CAMERA	AAA ELECTRIC CO.	S—300	MEGAPIXEL
	PRINTER	CC PRINTER CO.	XT—70	INK JET
	PRINTER	DD CO.	NX—500Z	SUBLIMATION

◄◄ ◄ 1/200 ► ►►   A33   (BACK)   A41

A35 A34 A31 A32

PAGE DEFINITION TABLE (AFTER CHANGE)

Fig. 13

PAGE NUMBER	PAGE NAME	ITEM-NAME NUMBER	ITEM ORDER	DISPLAY TYPE	VALUE
1	ROOT/query	1	3	TEXT	
1	ROOT/query	2	1	TEXT	
1	ROOT/query	9	2	LIST	AAA ELECTRIC CO./FFF ELECTRONICS CO./GG INDUSTRIES
1	ROOT/query	10	4	TEXT	
1	ROOT/query	11	5	TEXT	
2	ROOT/Entry	1	1	TEXT	
2	ROOT/Entry	2	2	TEXT	
2	ROOT/Entry	9	3	TEXT	
2	ROOT/Entry	10	5	TEXT	
2	ROOT/Entry	11	4	TEXT	
3	ROOT/List	1	2	TEXT	
3	ROOT/List	2	4	TEXT	
3	ROOT/List	9	1	TEXT	
3	ROOT/List	10	3	TEXT	
3	ROOT/List	11	5	TEXT	

Fig.14

PAGE NAME : ROOT/query

SET SEARCH CONDITIONS

A1

| SEARCH ALL | ITEM SEARCH |

PRODUCT NAME [   ] [MATCH ▼]

MANUFACTURE NAME [AAA ELECTRIC CO.] [MATCH ▼]

PRODUCT CATEGORY [PRINTER] [MATCH ▼]

PRODUCT FEATURE [   ] [INCLUDES ▼]

WEIGHT [   ] [~ ▼] [   ]

JOIN CONDITION ● AND ○ OR   A3

(SEARCH)   A4

Fig.15

PAGE NAME : ROOT/Entry
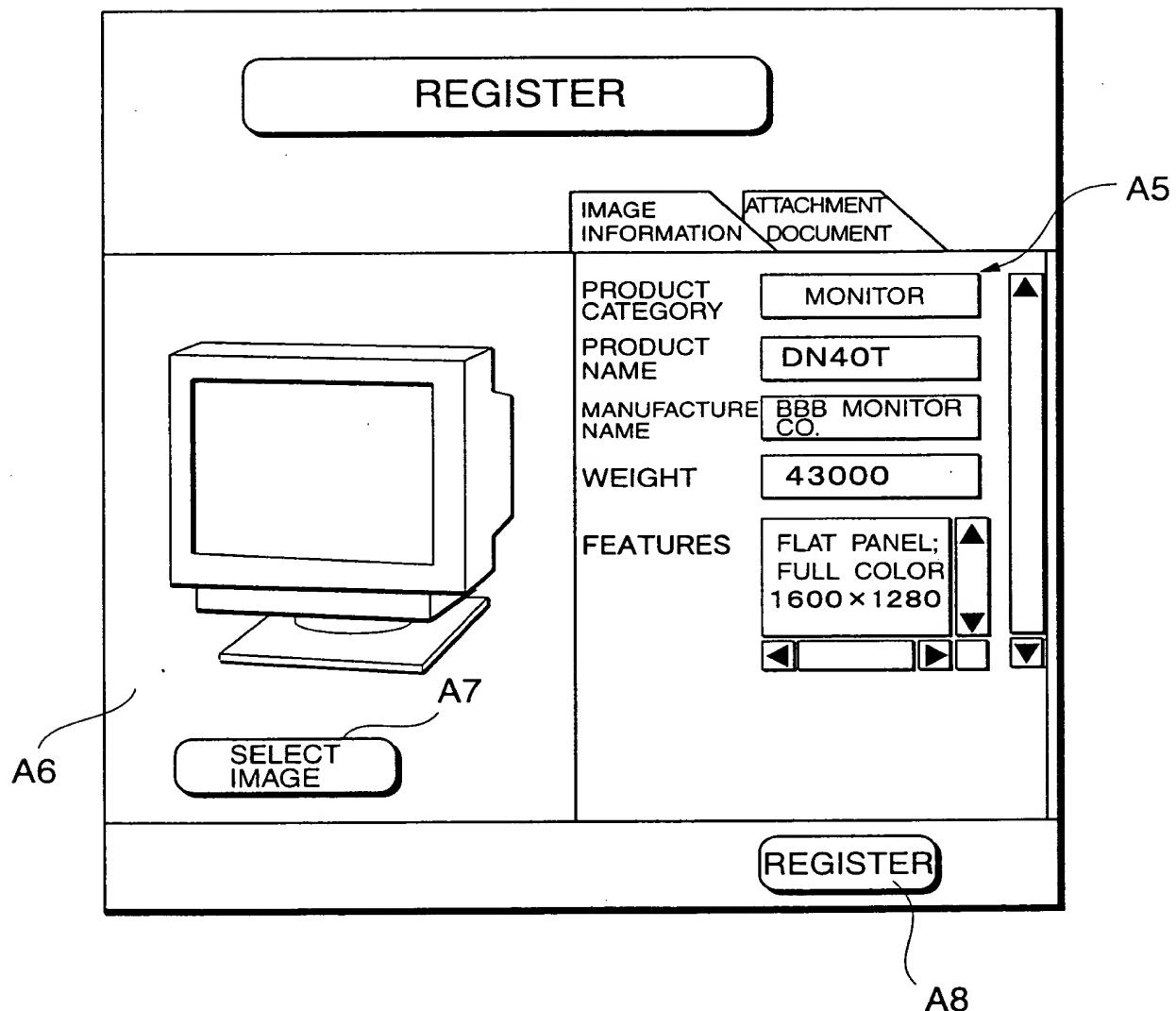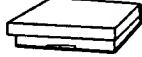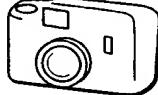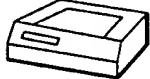
REGISTER

IMAGE INFORMATION | ATTACHMENT DOCUMENT

A5

PRODUCT CATEGORY	MONITOR
PRODUCT NAME	DN40T
MANUFACTURE NAME	BBB MONITOR CO.
WEIGHT	43000
FEATURES	FLAT PANEL; FULL COLOR 1600×1280

A7

SELECT IMAGE

A6

REGISTER

A8

Fig.16

PAGE NAME : ROOT/List

THUMBNAIL IMAGES	MANUFACTURE NAME	PRODUCT CATEGORY	FEATURE	PRODUCT NAME
	AAA ELECTRIC CO.	PRINTER	TA SYSTEM	C—300D
	AAA ELECTRIC CO.	CAMERA	MEGAPIXEL	S—300
	CC PRINTER CO.	PRINTER	INK JET	XT—70
	DD CO.	PRINTER	PHOTO-GRAPHIC	NX—500Z

LIST OF SEARCH RESULTS

A21 A22

GROUP KEYWORD | PRODUCT CATEGORY ▼ | (GROUPING)

A10

◀◀ ◀ 1/200 ▶ ▶▶   (BACK) A41

A33

A35 A34 A31 A32

Fig. 17

```
┌─────────────────────────┐
│   DISPLAY SEARCH PAGE    │
└─────────────────────────┘
             │
┌─────────────────────────┐
│   RECEIVE SEARCH-PAGE    │ ⟋ 31
│    DISPLAY REQUEST       │
└─────────────────────────┘
             │
┌─────────────────────────┐
│    APPLY SEARCH-PAGE     │
│  DISPLAY REQUEST TO      │ ⟋ 32
│      CONTROLLER          │
└─────────────────────────┘
             │
┌─────────────────────────┐
│  READ HTML TEMPLATE OF   │ ⟋ 33
│  SEARCH PAGE AND APPLY   │
│    TO SEARCH-PAGE        │
│   GENERATING UNIT        │
└─────────────────────────┘
             │
┌─────────────────────────┐
│   REQUEST DATABASE       │ ⟋ 34
│    CONTROLLER FOR        │
│     SEARCH ITEM          │
└─────────────────────────┘
             │
┌─────────────────────────┐
│    SERCH DATABASE        │ ⟋ 35
└─────────────────────────┘
             │
┌─────────────────────────┐
│    EXTRACT SEARCH        │ ⟋ 36
│       ITEMS              │
└─────────────────────────┘
             │
┌─────────────────────────┐
│   APPLY SEARCH ITEMS     │ ⟋ 37
│   TO SEARCH-PAGE         │
│   GENERATING UNIT        │
└─────────────────────────┘
             │
┌─────────────────────────┐
│   GENERATE SEARCH        │ ⟋ 38
│       PAGE               │
└─────────────────────────┘
             │
┌─────────────────────────┐
│   TRANSMIT SEARCH        │ ⟋ 39
│       PAGE               │
└─────────────────────────┘
             │
┌─────────────────────────┐
│        STOP             │
└─────────────────────────┘
```